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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,698	01/03/2000	SANDRO H. PINTZ	19223-000700	8171

22434   7590   04/06/2004

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EXAMINER
NGUYEN, HUY THANH

ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/476,698	PINTZ ET AL.
	Examiner	**Art Unit**	
	HUY T NGUYEN	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30,32 and 33* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30 and 32-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1-14 and 16-29 and 32-33 are rejected under 35 U.S.C. 102(e) as being

anticipated by Gadre et al (5,995,161).

Regarding claims 1 and 16 , Gadre discloses a system (Figs. 1-4, column 3,

lines 40-60)) for decoding and processing a subpicture data stream which comprises a

subpicture pixel data stream, and a subpicture display control data stream, said

subpicture display control data stream comprising one or more subpicture display

control commands, one or more of said subpicture display control commands

comprising subpicture display control information, said system comprising:

at least one processing unit (26,30) for receiving the subpicture data stream and

for processing software preprogrammed to perform at least some subpicture data

stream decoding and subpicture display control command execution (column 5, lines

15-25) ; and a subpicture hardware unit (28) configured to receive said subpicture pixel

data stream, subpicture display control information extracted from a subpicture display

control command executed by said at least one processing unit (column 5, line 61 to

column 6, line 68), and subpicture display control commands not executed by said at

least one processing unit (column 5 line 62 to column 6, line 12), and execute the

subpicture display control commands not executed by said at least one processing unit,

and generate subpicture display information for communication to a DVD video display

(42) (column 7, lines 5-11).

Regarding claims 2 and 17, Gadre further teaches the subpicture display

information comprising pixel color and contrast values for pixels in the subpicture

display (column 5, lines 5-15).

Regarding claims 3 and 18, Gadre further teaches storing said subpicture pixel

data stream and said subpicture display control data stream extracted from the Sub

picture data stream, said memory storing said sub picture pixel data stream and said

sub picture display control data stream prior to said at least one processing unit and

said subpicture hardware unit processing said sub picture pixel data stream and said

subpicture display control data stream (column 6, lines 12-60, column 8).

Regarding claims 4 and 19, Gadre further teaches the at least one

processing unit is programmed to execute one or more of the subpicture display control

commands selected from the group of subpicture display control commands

comprising FSTA-DSP, STA-DSP, STP-DSP, SET-COLOR, SET-CONTR,

SET_DAREA, SET DSPXA, and CMD-END (Fig. 5, column 6, lines 22-68).

Regarding claims 5 and 20, Gadre further teaches the at least one processing

unit executes said one or more of the subpicture display control commands by

extracting subpicture display control information from the subpicture display control

commands and transmitting the subpicture display control information to one or more

registers in said sub picture hardware unit, and wherein said sub picture hardware unit

uses the subpicture display control information in conjunction with sub picture pixel data

from said subpicture pixel data stream to generate said sub picture display information.

control information comprises pixel color information, pixel contrast information, or

subpicture display area information (column 6).

Regarding claims 6 and 22, Gadre further teaches the subpicture display control

information comprises pixel color information and contrast information (Fig. 5).

Regarding claims 7 and 23, Gadre further teaches the subpicture hardware unit

is configured to process real time, pixel-by-pixel subpicture display control 3 commands

(Abstract).

Regarding claims 8 and 24, Gadre further teaches one of said real time, pixel-

by-pixel subpicture display control commands comprises a change color/contrast 3

subpicture display control command (CHG_COLCON), Fig. 5, Abstract).

Regarding claim 9 and 25, Gadre further teaches the subpicture hardware unit

processes said real-time, pixel-by-pixel subpicture display control commands by

receiving subpicture pixel data and said real-time, pixel-by-pixel subpicture display

control commands, decode and process said real-time, pixel-by-pixel subpicture display

control commands in order to extract subpicture display control command information

therefrom, and process said subpicture pixel data in conjunction with said subpicture

display control command information to generate said subpicture display information
(columns 6 and 8, Abstract).

Regarding claims 10 and 26, Gadre further teaches the subpicture display
control command information comprise pixel color information and pixel contrast
information, and wherein said subpicture hardware unit uses a code from said
subpicture pixel data to assign a pixel color value from said pixel color information and a
pixel contrast value from said pixel contrast information to pixels which create the
subpicture display (column 8, lines 47-68).

Regarding claim 11 , Gadre further teaches the subpicture hardware unit
receives and decodes subpicture pixel data from said subpicture pixel data stream
which is run- length encoded (column 1, les 55-68).

Regarding claims 12 and 17. The system as recited in claim 1, wherein said
subpicture e hardware unit is configured to determine color and contrast values for each
pixel of the subpicture display (column 8, lines 48 to column 9, lines 12).

Regarding claims 13 and 27, Gadre further teaches the least one processing unit
comprises a first processing unit programmed to extract sub picture packs from a DVD-
video data stream , and a second processing unit programmed to receive the sub
picture packs from said first processing unit and extract and execute at least some of
the sub picture display control commands (column 3, lines 35-65).

Regarding claim 14, Gadre further teaches the at least one processing unit is
programmed to extract subpicture data packs from a DVD-video data

stream, extract said sub picture pixel data stream and said subpicture display control

data stream from said sub picture packs, store said subpicture pixel data stream and

said sub picture display control data stream in said memory, extract said sub picture

pixel data stream and said subpicture display control data stream from said memory

when needed, parse the sub picture display control data stream and extract sub picture

display control commands therefrom, and execute non-pixel -by- pixel subpicture

display control commands by extracting sub picture display control information

therefrom and transmitting, said subpicture display control information and sub picture

pixel data from said subpicture pixel data stream to said sub picture hardware unit for

processing (column 3, lines 35-68, column 6, Abstract, Figs. 3-4).

Regarding claim 21, Gadre further teaches using the display control information

to generate the subpicture display information (column 6, column 8, lines 49-50).

Regarding claim 28, Gadre teaches a system (Figs. 1-4, Abstract, column 6-9)

for processing a DVD-video data stream, a method for decoding, and processing a

subpicture data stream which comprises a sub picture pixel data stream, and a

subpicture display control data stream, said subpicture display control data stream

comprising one or more subpicture display control commands, one or more of said

subpicture display control commands comprising subpicture display control information,

said method comprising the steps of: at least one processing unit extracting sub picture

data packs from a DVD video data stream (column 1, lines 25-65) ; the at least one

processing unit extracting said subpicture pixel data stream and said subpicture

display control data stream from said sub picture packs (column 3, lines 25-65) ;

said at least one processing unit parsing the sub picture display control data

stream and extracting subpicture display control commands therefrom;

pixel-by-pixel display control command by extracting real-time, pixel-by-pixel

subpicture display control information therefrom (column 3, lines 35-65, Abstract) ;

said at least one processing unit decoding and executing non-pixel-by pixel subpicture

display control commands by extracting non-pixel-by-pixel subpicture display control

information therefrom and transmitting said non-pixel-by-pixel subpicture display control

information and the subpicture pixel data from said subpicture pixel data stream to a

subpicture hardware unit for processing; the at least one processing unit transmitting

real-time, pixel-by-pixel subpicture display control commands to said subpicture

hardware unit; the subpicture hardware unit decoding and executing said real-time,

 said subpicture hardware unit receiving said subpicture pixel data, and the non-pixel-

by-pixel subpicture display control information (column 4, lines 20-50, column 6, lines

10-31) ; and the sub picture hardware unit generating sub picture display information

using the sub picture pixel data, the non-pixel--by-pixel subpicture display control

information, and the real-time, pixel-by-pixel subpicture display control information and

28 presenting said sub picture display information to a DVD video display unit (42)

(column 5, lines 60-68, column 6, column 7, lines 1-15, column 8).

Regarding claim 29 , Gadre further teaches storing said sub picture pixel data

stream and said sub picture display control data stream in memory (column 6); and the

at least one processing unit obtaining said subpicture pixel data stream the subpicture

display control data stream from said memory when needed (column 6, column 8).

Regarding claim 32, Gadre further teaches the step of said sub picture hardware

unit processing real time, pixel-by-pixel subpicture display control commands

comprises processing a change color/contrast sub picture display control command

(CHG_COLCON)(Fig. 15).

Regarding claim 33, Gadre further teaches the subpicture hardware unit

receiving subpicture pixel data and said real-al time, pixel-by-pixel subpicture display

control commands; decoding and processing said real-time, pixel-by-pixel subpicture

display control commands in order to extract subpicture display control command

information therefrom; processing said subpicture pixel data in conjunction with said sub

picture display control command information to generate said sub picture display

information and decoding and extracting the subpicture data and display control

command (columns 6 and 8).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

4.   Claims 15 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Gadre et al (5,995,161) in view of Kitamura et al (5,758,007).

Regarding claims 15 and 30, Gadre fails to specifically teach that the non-pixel-by-

pixel subpicture display control commands comprise FSTA_DSP, STA__DSP,

STP_DSP, SETCOLOR, SET-CONTR, SET-DAREA, SE'T_DSPXA, and CMDEND.

Kitamura teaches an apparatus for processing and decoding when the display control

command comprising FSTA_DSP, STA__DSP, STP_DSP, SETCOLOR, SET-

CONTR, SET-DAREA, SET_DSPXA, and CMDEND (Fig. 34).

It would have been obvious to one of ordinary skill in the art to modify Gadre with

Kitamura by providing the display control command comprises FSTA_DSP,

STA__DSP, STP_DSP, SETCOLOR, SET-CONTR, SET-DAREA, SE'T_DSPXA, and

CMDEND as taught by Katimura with subpicture data thereby accurately processing

and decoding the subpicture data when needed.

Conclusion

5.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T NGUYEN whose telephone number is (703) 305-4775. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

H.N

HUY NGUYEN
PRIMARY EXAMINER